

BRFSS Brief

Number 1101

The Behavioral Risk Factor Surveillance System (BRFSS) is an annual statewide telephone survey of adults developed by the Centers for Disease Control and Prevention and administered by the New York State Department of Health. The BRFSS is designed to provide information on behaviors, risk factors, and utilization of preventive services related to the leading causes of chronic and infectious diseases, disability, injury, and death among the noninstitutionalized, civilian population aged 18 years and older.

Diabetes

New York State Adults 2009

Introduction

Diabetes is a chronic disease in which blood sugar (glucose) levels are above normal. Normally, cells in the body access the energy stored in glucose, a form of sugar created from digestion of food, through a chemical process involving the hormone insulin. In people with diabetes, this process is impaired. In persons with Type 1 diabetes, the pancreas fails to produce insulin, and in those with Type 2 diabetes, the cells of the body become resistant to insulin. Both Type 1 and Type 2 diabetes are characterized by high blood sugar or hyperglycemia.¹

National data indicate almost 40% of the U.S. population has some type of hyperglycemic condition.² Projections based on national trends suggest that 1 in 3 Americans will develop diabetes in their lifetime.³ The risk factors for diabetes include both characteristics that cannot be modified, including race, ethnicity, family history and age, and behavioral

and lifestyle characteristics that can be modified, including sedentary behavior, eating habits and the management of other chronic conditions. The New York State Department of Health's Prevention Agenda Toward the Healthiest State established a goal of reducing the prevalence of diagnosed diabetes to 5.7% by 2013.³

Diabetes is a major risk factor for other diseases and disabilities, including heart disease, stroke, blindness, kidney failure, lower-extremity amputations, infection, and complications during pregnancy.⁴ Medical expenditures for people with diagnosed diabetes are more than double those for people without diabetes.⁴ In 2006, the total cost for New Yorkers with diabetes was almost \$12.9 billion, including excess medical costs of approximately \$8.7 billion and lost productivity valued at \$4.2 billion.⁵

BRFSS Questions

Diagnosed diabetes

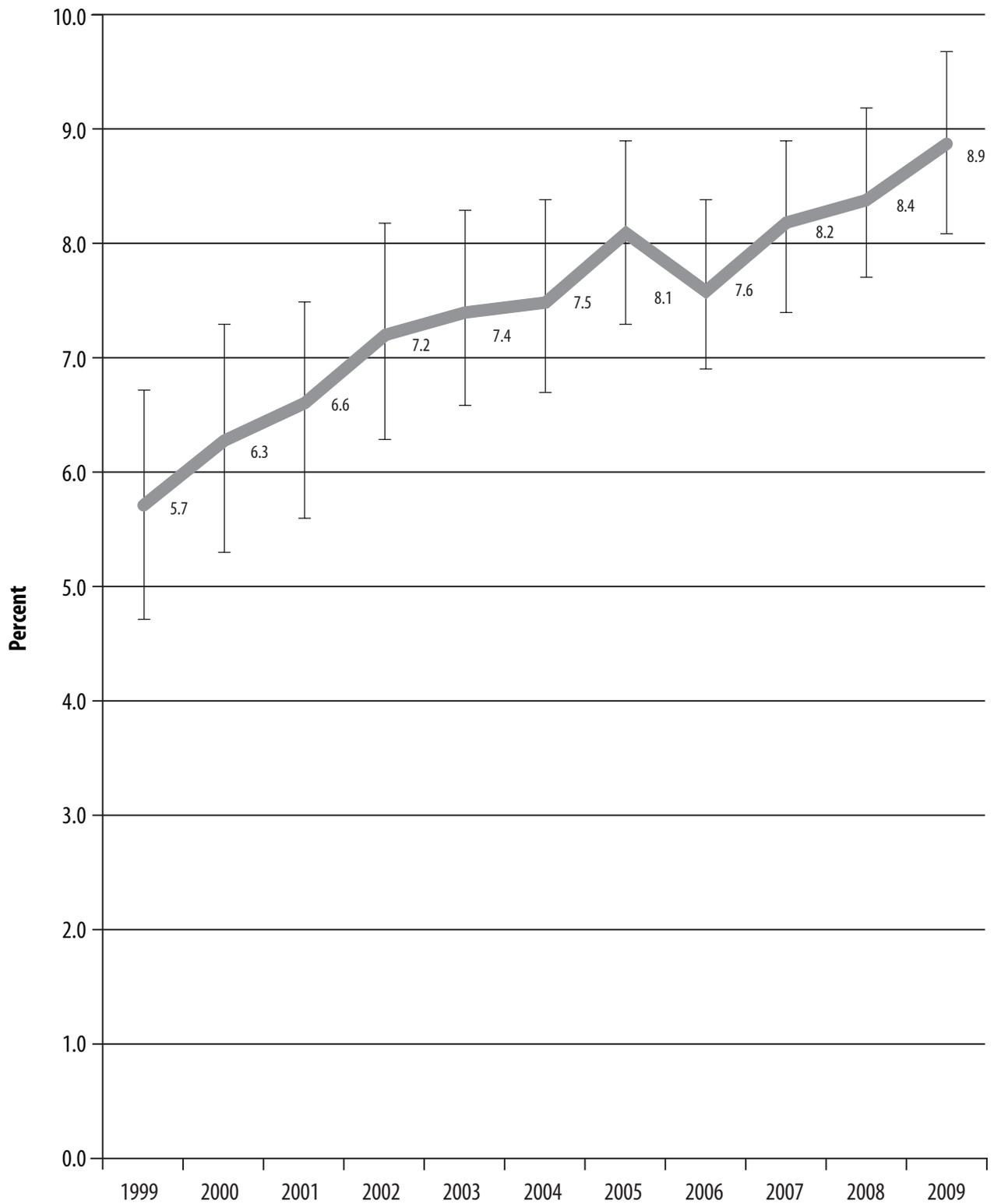
1. *Have you ever been told by a doctor that you have diabetes?*

[If "yes" and respondent is female, ask:]

2. *Was this only when you were pregnant?*

Gestational (pregnancy-related) diabetes, pre-diabetes, and borderline diabetes were not counted as diabetes cases in the calculation of prevalence estimates.

Diabetes^a Among New York State Adults, by BRFSS survey year



* Does not include reported gestational diabetes, pre-diabetes, or borderline diabetes.

Note: Error bars represent 95% confidence intervals.

Diabetes^a Among New York State Adults: 2009 BRFSS

	% ^b	95% CI ^b
New York State (NYS) [n=6,927]	8.9	8.1-9.7
Sex		
Male	9.6	8.2-10.9
Female	8.2	7.2-9.2
Age (years)		
18-24	0.8	0.0-1.9
25-34	1.4	0.5-2.3
35-44	3.9	2.3-5.6
45-54	8.4	6.4-10.4
55-64	16.7	14.1-19.4
≥ 65	21.1	18.9-23.3
Race/ethnicity		
White non-Hispanic	7.8	7.1-8.6
Black non-Hispanic	14.0	10.7-17.3
Hispanic	8.9	6.4-11.5
Other non-Hispanic	8.9	5.7-12.3
Annual household income		
<\$15,000	16.9	13.0-20.8
\$15,000-\$24,999	14.8	12.0-17.6
\$25,000-\$34,999	10.6	7.2-14.0
\$35,000-\$49,999	9.0	7.0-11.0
\$50,000-\$74,999	5.9	4.0-7.8
≥\$75,000	4.4	3.3-5.5
Missing ^c	9.2	7.2-11.2
Educational attainment		
Less than high school	14.5	10.9-18.1
High school or GED	12.2	10.4-14.0
Some post-high school	8.5	7.0-10.0
College graduate	5.3	4.2-6.4
Body Mass Index (BMI) Category		
Neither overweight nor obese	3.8	2.9-4.6
Overweight	9.1	7.7-10.6
Obese	16.7	14.5-18.9
Disability^d		
Yes	19.2	16.7-21.6
No	6.2	5.4-7.0
Region		
New York City (NYC)	10.2	8.5-11.9
NYS exclusive of NYC	8.2	7.3-9.1

a Does not include reported gestational diabetes, pre-diabetes, or borderline diabetes.

b % = weighted percentage; CI = confidence interval

c "Missing" category included because more than 10% of the sample did not report income.

d All respondents who report activity limitations due to physical, mental, or emotional problems OR have health problems that require the use of special equipment.

References

1. National Institute of Diabetes and Kidney Diseases, National Institutes of Health. Diagnosis of Diabetes, National Diabetes Clearinghouse. Available at: <http://diabetes.niddk.nih.gov/dm/pubs/diagnosis>. Accessed September 9, 2010.
2. Cowie CC, Rust KF, Ford ES, Eberhardt MS, Dyrd-Holt DD, Li C, Williams DE, Gregg EW, Bainbridge KE, Saydah SH, Geiss LS. Full Accounting of Diabetes and Pre-Diabetes in the U.S. Population in 1988-1994 and 2005-2006. *Diabetes Care*. Feb 2009; 32(2):287-294. Available at: <http://care.diabetesjournals.org/content/32/2/287.full.pdf+html?sid=94fc2171-ed08-4efb-a48a-bbd840c2fa40>.
3. New York State Department of Health. Prevention Agenda toward the Healthiest State 2008-2013. Available at: http://health.ny.gov/prevention/prevention_agenda/index.htm.
4. Centers for Disease Control and Prevention. Diabetes: Successes and Opportunities for Population-Based Prevention and Control: At a Glance, 2010. Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, 2010. Available at: http://www.cdc.gov/chronicdisease/resources/publications/aag/pdf/2010/diabetes_aag.pdf.
5. American Diabetes Association: Diabetes Cost Calculator. Available at: <http://www.diabetes.org/advocate/resources/cost-of-diabetes.html>. Accessed September 24, 2010.

Program Contributions

Diabetes Prevention and Control Program
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